

Work Order ID 86146

June-21-12 8:39:31 AM

86146

Page 1

Item ID: D4027-043

Accept

N900040100

Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Hose Clamp Assembly

Start Date: 21/06/2012 Start Qty: 2.00

2

Cust Item ID:

Required Date: 05/07/2012 Req'd Qty: 2.00

2

Customer:

Reference:

Approvals: Process Plan: MLJ

Date: 12/06/21 Tooling:

Date:

Run Start ***NR1***

QC:

Date: SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr

Revision Nbr

D4027

A

100 0.00

100

Small Fab

Memo

0.00

2

Ø

FB
12-08-23

Small Fab

Drill hole and assemble as per dwg notes
3M Countact adhesive batch: M122306

110

QC5- Inspect part completeness to step on W/O

0.00

110

QC

Memo

0.00

SMB
12-8-23

DAS
16

12/08/23

①

Quality Control

120

Identify as per dwg & Stock Location: 450

0.00

120

Packaging

Memo

0.00

SL

2x

SL

12/8/23

Packaging

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

June-21-12 8:39:36 AM

Page 1

86146

D4027-043

Start Date: 21/06/2012

Required Date: 05/07/2012

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP rev A 10.02.01 new issue Prelim EC verified by:JLM IPP Rev:B
10.05.17 as per ECN10-562 DD verf:EC IPP Rev:C 11.08.04
was MS21042L09 is 06 (nut) DD verf:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D4027-3 *D4027-3* Hose Clamp		Manufactured	No			100	Each	6.0000	1	2	**	(2) FF 12-08-23	
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				ST450				6					
				80635				6		2			
D4027-7 *D4027-7* Rubber Cushion -5		Manufactured	No			100	Each	16.0000	1	2	**	(2) FF 12-08-23	
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				GA				16		1			
				67814				5		1			
				83970				11		2			
AN743-13 *AN743-13* BRACKET		Purchased	No			100	Each	12.0000	1	2	**	(2) FF 12-08-23	
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				ST324				10		2			
				121825				10					
				ST348				2					
				120242				2					

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NOTE: Date & initial all entries

Picklist Print

June-21-12 8:39:36 AM

Page 2

Work Order ID: 86146

86146

Parent Item: D4027-043

D4027-043

Parent Item Name: Hose Clamp Assembly

Start Date: 21/06/2012

Required Date: 05/07/2012

Start Qty: 2.00

Required Qty: 2.00

NAS1149DN632J

Purchased

No

100

Each

180.0000

1

2

NAS1149DN632.J

Washer

**

② FF 12-08-23

Location

Loc Qty

Loc Code

ST298

180

118428

180

2

MS24693-S28

Purchased

No

100

Each

123.0000

1

2

MS24693-S28

Screw

**

② FF 12-08-23

Location

Loc Qty

Loc Code

ST288

123

11334

73

2

4824

9

8170

41

MS21042L06

Purchased

No

100

Each

198.0000

1

2

MS21042L 06

Nut

**

② FF 12-08-23

Location

Loc Qty

Loc Code

ST300

198

118354

2

119109

1

119758

1

121444

94

121556

100

2

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

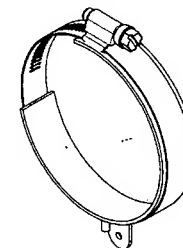
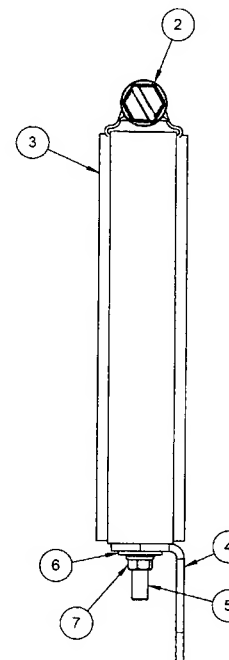
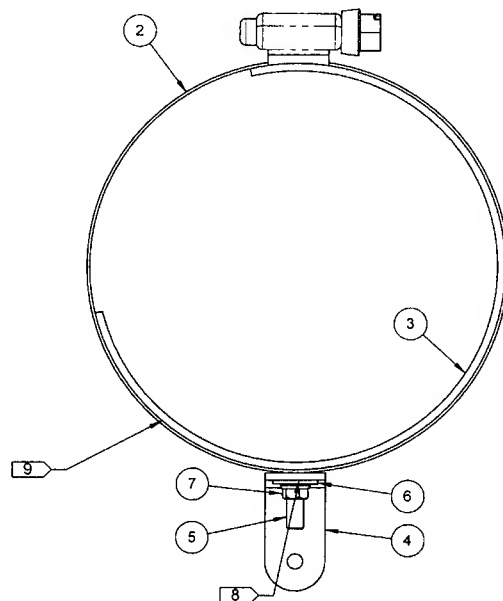
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NOTE: Date & initial all entries

ITEM NO.	QTY. -041	PART NUMBER	DESCRIPTION	JOHN CAMERON AVIATION PART NUMBER
1	X	D4027-041	VENT CLAMP ASSEMBLY	JCA-M47-2-20
2	1	D4027-1	HOSE CLAMP	
3	1	D4027-5	RUBBER CUSHION	
4	1	D4027-9	BRACKET, SUPPORT ANGLE	
5	1	MS24693S28	SCREW	
6	1	NAS1149DN632J	WASHER	
7	1	MS21042L09	NUT	



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SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 86146 MLJ
12/00/21

RELEASED
2010-05-05
mb

D4027-041 VENT CLAMP ASSEMBLY

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D4027-041" AND B/N USING FINE POINT PERMANENT INK MARKER
- 7) WEIGHT: 0.06 lbs
- 8) ATTACH D4027-9 BRACKET USING MS24693S28 SCREW, MS21042L06 NUT AND NAS1149DN632F WASHER
- 9) GLUE D4027-5 RUBBER CUSHION TO D4027-1 CLAMP USING 3M CONTACT CEMENT IN POSITION AS SHOWN

A	NEW ISSUE		10.04.16
REV.	DESCRIPTION	BY	DATE
DESIGN			
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	10.04.16		

DART AEROSPACE LTD
HAWKESBURY, ONTARIO, CANADA

DRAWING NO.
D4027
REV. A
SHEET 1 OF 7
TITLE
CLAMP
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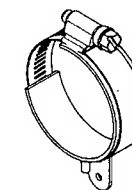
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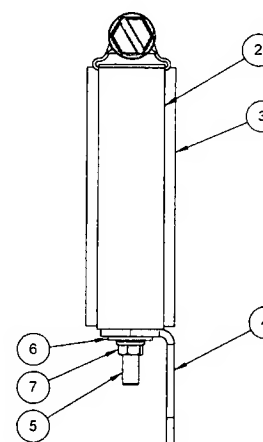
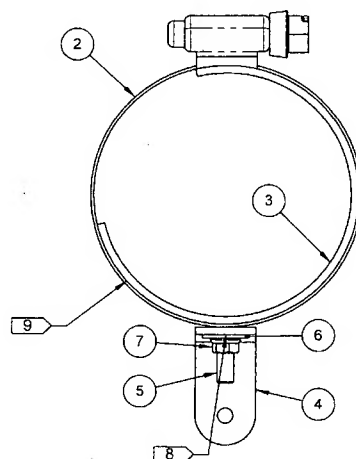
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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

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ITEM NO.	QTY. -043	PART NUMBER	DESCRIPTION	JOHN CAMERON AVIATION PART NUMBER
1	X	D4027-043	VENT CLAMP ASSEMBLY	JCA-M47-2-35
2	1	D4027-3	HOSE CLAMP	
3	1	D4027-7	RUBBER CUSHION	
4	1	D4027-9	BRACKET, SUPPORT CLAMP	
5	1	MS24693S28	SCREW	
6	1	NAS1149DN632J	WASHER	
7	1	MS21042L09	NUT	



86146



D4027-043 VENT CLAMP ASSEMBLY

RELEASED
2010-05-05
NW

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D4027-043" AND B/N USING FINE POINT PERMANENT INK MARKER
- 7) WEIGHT: 0.06 lbs
- 8) ATTACH D4027-9 BRACKET USING MS24693S28 SCREW, MS21042L06 NUT AND NAS1149DN632F WASHER
- 9) GLUE D4027-7 RUBBER CUSHION TO D4027-3 CLAMP USING 3M CONTACT CEMENT IN POSITION AS SHOWN

DESIGN		DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. A
MFG. APPR.		D4027	SHEET 2 OF 7
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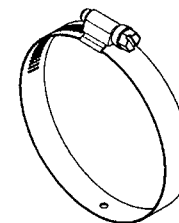
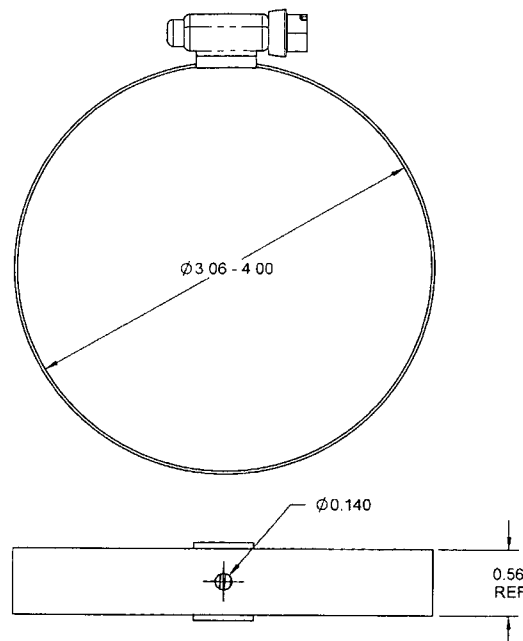
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE PART NUMBER	JOHN CAMERON AVIATION PART NUMBER
D4027-1	REF JCA-M47-2-20



86146

D4027-1 HOSE CLAMP

RELEASED
2010-05-25
WBS

NOTES:

- 1) MATERIAL: MADE FROM QS200M56S
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D4027-1" AND B/N USING FINE POINT PERMANENT INK MARKER
- 7) WEIGHT: 0.05 lbs
- 8) DRILL Ø 0.140 HOLE AS SHOWN OPPOSITE WORM DRIVE SCREW, DIMPLE HOLE FROM INSIDE FOR MS24693S28 SCREW

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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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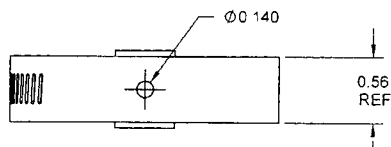
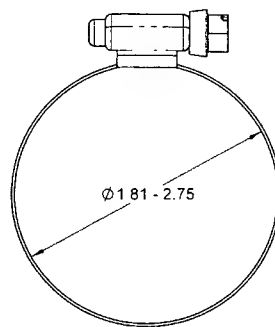
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PART NUMBER

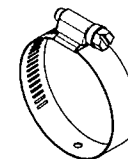
D4027-3

JOHN CAMERON AVIATION
PART NUMBER

REF JCA-M47-2-35



D4027-3 HOSE CLAMP



86146

NOTES:

- 1) MATERIAL: MADE FROM QS200M36S
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION IDENTIFY WITH DART P/N "D4027-3" AND B/N USING FINE POINT PERMANENT INK MARKER
- 7) WEIGHT: 0.05 lbs
- 8) DRILL Ø0.140 HOLE AS SHOWN OPPOSITE WORM DRIVE SCREW, DIMPLE HOLE FROM INSIDE FOR MS24693S28 SCREW

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MFG. APPR.		D4027	SHEET 4 OF 7
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RELEASED
2010-05-05

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W/O:		WORK ORDER CHANGES					
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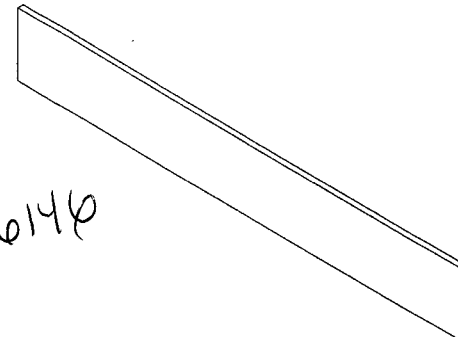
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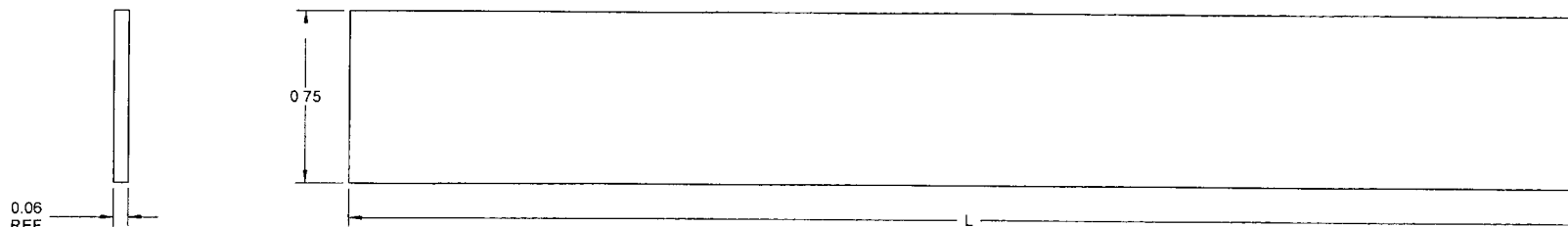
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DART AEROSPACE PART NUMBER	JOHN CAMERON AVIATION PART NUMBER
D4027-5	REF JCA-M47-2-20
D4027-7	REF JCA-M47-2-35



86148



DART PART NUMBER	LENGTH "L"
D4027-5	5.30
D4027-7	8.25

D4027-X RUBBER CUSHION

RELEASED
2010-05-05
MP

NOTES:

- 1) MATERIAL: BLACK SOLID RUBBER NEOPRENE SHEET, 0.063 THICK
REF DART SPEC M-NEO-60-S 063
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.01 lbs

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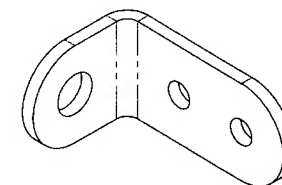
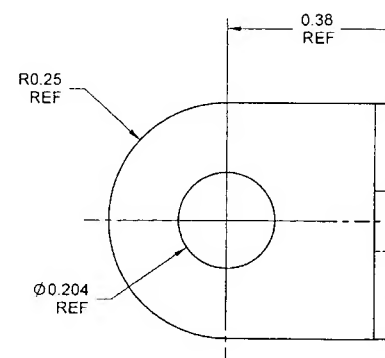
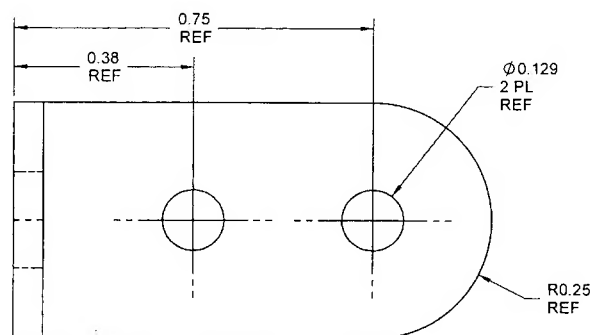
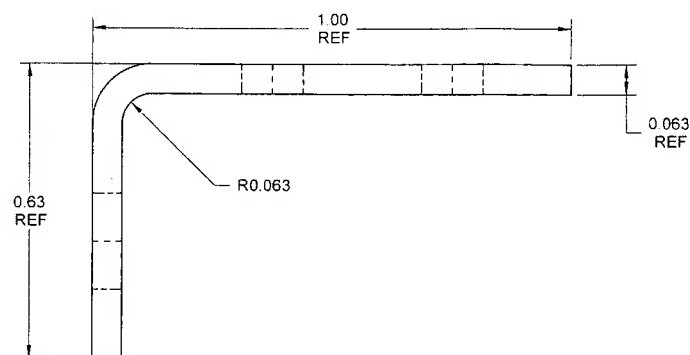
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE PART NUMBER	JOHN CAMERON AVIATION PART NUMBER
D4027-9	REF JCA-M47-2-20/-35



86146

D4027-9 BRACKET, SUPPORT ANGLE

RELEASED
2010-05-05
MD

- NOTES:
- 1) MATERIAL: MADE FROM D4027-9F OR EQUIVALENT TO AN743-C13
 - 2) FINISH: N/A
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: N/A
 - 7) WEIGHT: 0.00 lbs

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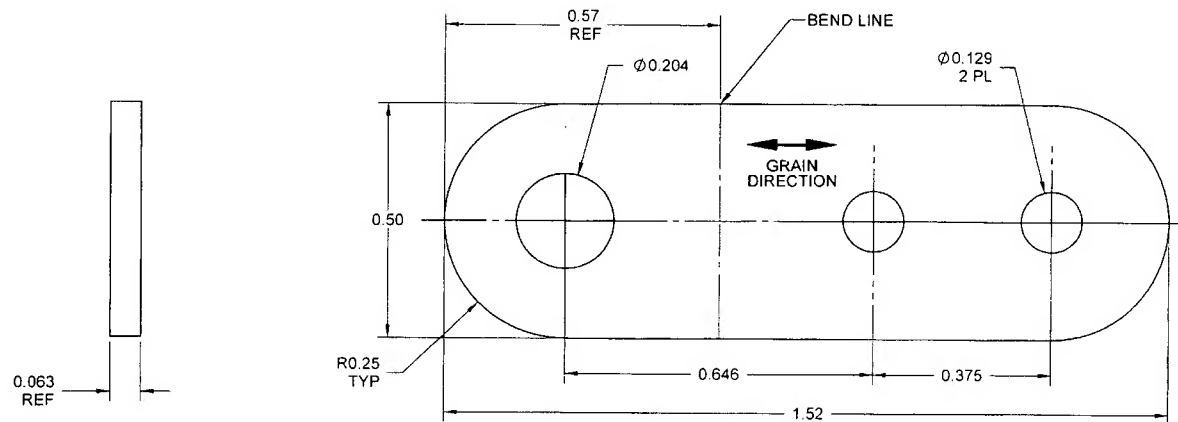
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NOTE: Date & initial all entries

861410



D4027-9F FLAT PATTERN

RELEASED
2010-05-05
MD

NOTES:

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL SHEET, 0.063 THICK
PER AMS5513 (304) OR AMS 5524 (316)
OR ASTM A240 OR ASME SA240
REF DART SPEC M304S16GA
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.00 lbs

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries